

## NOTES

### NEW COMBINATIONS IN CENTRAL AMERICAN ARACEAE

Work in recent years with the Araceae of Central America necessitates new combinations involving species in the genera *Monstera* and *Philodendron* which were erroneously published as belonging to *Rhodospatha* and *Syngonium* respectively.

***Monstera costaricensis*** (Engl. & Krause) Croat & Grayum, comb. nov. *Rhodospatha costaricensis* Engl. & Krause, Das Pflanzenr. 4. 23B (Heft 37): 95. 1908. TYPE: Costa Rica. Limón: Ferme de Boston, Atlantic watershed, 30 m elev. 10°01'N, 83°15'30"W, *Tonduz 14628* (holotype, B).

We had concluded that this distinctive species of *Monstera*, occurring in primary forest at Finca La Selva, was undescribed and had provisionally assigned it the name "*Monstera undulata*." It now turns out that this species was previously described by Engler & Krause (1908) in the genus *Rhodospatha*; the transfer to *Monstera* is herewith effected. *Monstera costaricensis* is distinguished from other species by its strongly undulate petiole sheaths, tuberculate petiole bases and pistils shaped like bowling pins. The lamina may be either entire (as on the holotype) or perforate. *Monstera costaricensis* is now known in the Atlantic lowlands of Costa Rica from La Selva to Punta Mona. It probably occurs in Nicaragua and Panama as well.

***Monstera dissecta*** (Schott) Croat & Grayum, comb. nov. *Tornelia dissecta* Schott, Oesterr. Bot. Z. 8: 179. 1858. TYPE: Costa Rica. Cartago: Volcán de Turrialba, *Wendland 500* (holotype, GOET).

Although the name *Monstera dilacerata* is well known and firmly entrenched in both taxonomic and horticultural aroid literature, it has been applied in a highly indiscriminate manner and, indeed, may be impossible to confidently assign to any real biological entity. As described by Madison (1977), "the type of *M. dilacerata* is an inferior specimen consisting of a few leaves from an immature cultivated plant of uncertain geographic origin." Such a specimen, even if it could be located, would be virtually impossible to identify with any biological species in a genus as phe-

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notypically plastic as *Monstera*; but the type of *Monstera dilacerata* is apparently not extant, having been destroyed in the Berlin herbarium during World War II, and we know it only from photos.

Madison (1977), determined to salvage this well-known name by any means, adopted the concept of Engler & Krause (1908). Although the latter authors applied the name *M. dilacerata* rather consistently (i.e., to the species here treated as *M. dissecta*), their concept would appear to be completely irrelevant; what matters is the interpretation of the type material. It could be argued that Engler & Krause might have seen living (perhaps even fertile) material from the original collection, but they give no such indication and the point is moot.

Madison (1977) himself made matters significantly worse by applying the name *Monstera dilacerata* with reckless abandon. Based on his specimen citations, herbarium annotations, and the use of his keys, Madison has employed the name *M. dilacerata* for no fewer than four distinctly different species in Costa Rica alone (Croat & Grayum, unpubl. data). Given the expansive geographic distribution of *Monstera dilacerata* sensu Madison (from Guatemala to Amazonian Brazil), the application of the latter name to any one of the four Costa Rican species would have to be entirely arbitrary. Indeed, the type might just as well have come from Brazil, and may represent a different species altogether.

The only alternative seems to be the relegation of the much-abused name *Monstera dilacerata* Schott to the limbo of nomen dubium status, where it will probably lie forever unless someone can come up with a way (epidermal anatomy?) to unequivocally interpret the type specimen, in the unlikely event that it ever turns up. Three of the four Costa Rican species in the *Monstera dilacerata* complex have apparently never been described (they will be described elsewhere). The fourth clearly corresponds to *Tornelia dissecta* Schott, the type of which is extant at GOET and has been studied by the present authors (Madison was apparently unaware of its existence). The specimen is a good one and agrees in all details with a species we know well from throughout Costa Rica (but mostly from the Atlantic slope)

at elevations of ca. 100–1,800 m. Contemporary collections from the general vicinity of the type locality include: *Grayum & Sleeper 3304* (CR, MO); *Grayum et al. 3490* (CR, MO); and *Grayum & Hammel 5739* (MO). The appropriate new combination in *Monstera* is made above.

***Philodendron rothschuhianum*** (Engl. & Krause) Croat & Grayum, comb. nov. *Syngonium rothschuhianum* Engl. & Krause, Das Pflanzenr. 4. 23E (Heft 71): 124. 1920. TYPE: Nicaragua. Matagalpa: Matagalpa, 1,000 m, *Rothschuh 229* (holotype, B).

This species has long been excluded from *Syngonium*, perhaps having been first so treated by Birdsey (1955) in an unpublished thesis. Croat (1981) erroneously placed the species with *P. anisotomum* Schott. There is no longer any doubt that it is a distinct species, distinguished from the latter by having the posterior lobes more

broadly confluent with the anterior lobe and by details of the inflorescence. The species ranges from Nicaragua to western Panama (Veraguas) from sea level to 1,000 m.

#### LITERATURE CITED

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